REMARKS

Claims 1, 3-6, 8, 11-13, 15, 17, 18 and 20 have been amended to improve form.

Claims 1-20 remain pending in this application.

Claims 1-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over

Sampath et al. (U.S. Patent Publication No. 2002/0009081; hereinafter Sampath) in view of

SmartSwitch 2000 Firmware version 4.05.06 (hereinafter SmartSwitch 2000). The rejection

is respectfully traversed.

Claim 1 recites a network device configured to control communication of data

frames between stations that includes a plurality of receive ports configured to receive data

frames from the stations. Claim 1, as amended, recites a buffer configured to buffer the

received data frames and queuing logic configured to obtain a frame pointer for each of the

received data frames, each frame pointer identifying a location in a memory located

externally from the network device, and transfer each of the received data frames to the

external memory for storage in a location identified by one of the respective frame pointers.

The combination of Sampath and SmartSwitch 2000 does not disclose or suggest these

features.

For example, Sampath discloses that as a packet is received, it is put into an input

FIFO and an address resolution request is sent to the ARL engine as soon as the first 16

bytes arrive in the input FIFO (Sampath – paragraph 94). Sampath does not disclose or

suggest queuing logic configured to obtain a frame pointer for each of the received data

frames, where each frame pointer identifies a location in a memory located externally from

the network device, as required by amended claim 1. Sampath further does not disclose or

suggest queuing logic that transfers each of the received data frames to the external memory

for storage in a location identified by one of the respective frame pointers, as further required by amended claim 1. SmartSwitch 200 also does not disclose or suggest these features.

For at least these reasons, the combination of Sampath and SmartSwitch does not disclose or suggest each of the features of amended claim 1.

In addition, even if, for the sake of argument, the combination of Sampath and SmartSwitch 2000 could be fairly construed to disclose or suggest each of the features of amended claim 1, the applicant asserts that the motivation for combining Sampath and SmartSwitch 2000 does not satisfy the requirements of 35 U.S.C. § 103. For example, the Office Action states that it would have been obvious to combine Sampath and SmartSwitch 2000 "to create more flexibility by being able to use the switch in multiple network environments, specifically either a network using the 802.1D protocol or a network using the 802.1Q protocol" (Office Action – page 7). The applicant respectfully disagrees.

The motivation for combining Sampath and SmartSwitch is merely a conclusory statement regarding an alleged benefit of the combination. No portion of either reference is pointed to as providing objective motivation for combining Sampath and SmartSwitch. Such motivation does not satisfy the requirements of 35 U.S.C. § 103.

For at least the reasons discussed above, withdrawal of the rejection and allowance of claim 1 are respectfully requested.

Claims 2-7 are dependent on claim 1 and are believed to be allowable over the combination of Sampath and SmartSwitch for at least the reasons claim 1 is allowable. In addition, these claims recite additional features not disclosed or suggested by the combination of Sampath and SmartSwitch 2000.

For example, claim 6 recites that the processing logic is further configured to identify data forwarding information for a first one of the received data frames, generate a forwarding descriptor for the first data frame, the forwarding descriptor including: an untagged set field identifying at least one transmit port and an opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged or priority-tagged. The Office Action states that Sampath discloses these features and points to paragraphs 94 and 126-139 for support (Office Action – page 9). The applicant respectfully disagrees.

Sampath at paragraph 94 discloses that the ARL engine does an ARL table search based on the source MAC address and destination MAC address. Sampath at paragraphs 126-139 discloses various fields in the ARL address table. None of these portions of Sampath discloses or suggests generating a forwarding descriptor that includes an untagged set field identifying at least one transmit port and an opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged or priority-tagged, as required by claim 6.

For at least these additional reasons, withdrawal of the rejection and allowance of claim 6 are respectfully requested.

Claim 8, as amended, recites features similar to claim 1. For reasons similar to those discussed above with respect to claim 1, withdrawal of the rejection and allowance of claim 8 are respectfully requested.

Claims 9-14 are dependent on claim 8 and are believed to be allowable for at least the reasons claim 8 is allowable. In addition, these claims recite additional features not disclosed or suggested by the combination of Sampath and SmartSwitch.

For example, claims 13 recites features similar to claim 6. For reasons similar to those discussed above with respect to claim 6, withdrawal of the rejection and allowance of claim 13 are respectfully requested.

Claim 15, as amended, recites features similar to claim 1. For reasons similar to those discussed above with respect to claim 1, the combination of Sampath and SmartSwitch 2000 does not disclose or suggest each of the features of amended claim 15.

Claim 15 also recites that the decision making engine is configured to generate a forwarding descriptor for the first data frame, the forwarding descriptor including: an untagged set field identifying at least one transmit port and a first opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged or priority-tagged. Similar to the discussion above with respect to claim 6, neither Sampath nor SmartSwitch 2000 discloses or suggests this feature.

Claim 15 also recites processing logic configured to generate a second opcode to indicate that the first data frame is to be transmitted without modification, when the network device is operating in accordance with a first protocol and generate a second opcode to indicate that the first data frame is to be transmitted without a VLAN tag, the first data frame is to be transmitted with a VLAN tag or the first data frame is to be transmitted without modification, when the network device is operating in accordance with a second protocol and based on the contents of the untagged set field and the first opcode field. The Office Action admits that Sampath does not disclose these features (Office Action – page 5). The Office Action, however, states that the switch in SmartSwitch 2000 must follow the rules associated with 802.1D or 802.1Q protocols with respect to modifying data frames before forwarding the data frames (Office Action – page 5). The Office Action further

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references the applicant's specification with respect to operating in accordance with 802.1D or 802.1Q (Office Action – page 7).

Initially, the applicant notes that since the combination of Sampath and SmartSwitch 2000 does not disclose or suggest generating a forwarding descriptor that includes the claimed untagged set field and a first opcode field, the combination cannot disclose generating a second opcode field to indicate that the first data frame is to be transmitted without a VLAN tag, the first data frame is to be transmitted with a VLAN tag or the first data frame is to be transmitted without modification, when the network device is operating in accordance with a second protocol and <u>based on the contents of the untagged set field and the first opcode field</u>, as required by claim 15.

In addition, the applicant's background section discloses that in an 802.1Q mode, each frame coming into a switch or bridge must be assigned to a VLAN and that various rules associated with 802.1Q must be followed. The applicant's background section further discloses that in an 802.1D mode, switches or bridges must ignore VLANs and frames are forwarded as they were received. This portion of the applicant's specification, however, cannot be fairly construed to disclose or suggest the specifically recited features of claim 15. That is, the background portion of the applicant's specification does not disclose or suggest processing logic on a network device that is configured to generate a second opcode to indicate that the first data frame is to be transmitted without modification, when the network device is operating in accordance with a first protocol and generate a second opcode to indicate that the first data frame is to be transmitted without a VLAN tag, the first data frame is to be transmitted with a VLAN tag or the first data frame is to be transmitted without modification, when the network device is operating in accordance with a second

protocol and based on the contents of the untagged set field and the first opcode field.

Further, neither Sampath nor SmartSwitch 2000 discloses or suggests these features. In

other words, just because SmartSwitch 2000 discloses that the switch can operate in

accordance with either 802.1D or 802.1Q protocols does not mean that such a switch

performs the specifically recited features discussed above with respect to generating the

claimed second opcode.

For at least these reasons, the combination of Sampath and SmartSwitch 2000 does

not disclose or suggest each of the features of claim 15. Accordingly, withdrawal of the

rejection and allowance of claim 15 are respectfully requested.

Claims 16-20 are dependent on claim 15 and are believed to be allowable for at least

the reasons claim 15 is allowable. In addition, these claims recite additional features not

disclosed or suggested by the combination of Sampath and SmartSwitch 2000.

For example, claim 18 recites that the first transmit module is further configured to

at least one of insert VLAN information into the first data fame, delete VLAN information

included with the first data frame or modify VLAN information included with the first data

frame, when the network device is operating in accordance with the second protocol and

based on the second opcode and forward the first data frame to at least the first transmit

port. Since the combination of Sampath and SmartSwitch 2000 does not disclose or suggest

generating the claimed second opcode, the combination cannot disclose or suggest at least

one of inserting, deleting or modifying VLAN information when the network device is

operating in accordance with the second protocol and based on the second opcode, as

required by claim 18.

For at least this additional reason, withdrawal of the rejection and allowance of claim 18 are respectfully requested.
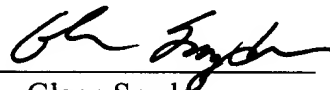
CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests withdrawal of the outstanding rejections and the timely allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, please feel free to call the undersigned attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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